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Reise et al.

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[54] **SYSTEM FOR SHOCK HARDENING A
TORPEDO NOSE FAIRING BEARING PLATE
ASSEMBLY**

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[58] **Field of Search** 114/20.1, 312,
114/316, 318, 319, 238; 89/1.806, 1.809,
1.81; 102/259

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[57] **ABSTRACT**

A system for shock hardening the nose fairing bearing plate assembly of a torpedo by controlling the deformation of the bearing plate under shock loads. A stop bolt within a torpedo tube engages the bearing plate to prevent relative movement between the torpedo tube and the torpedo and to transfer loads between the torpedo housing and the torpedo tube. The system includes providing a tang on the bearing plate to increase bending resistance of the plate and provide a bearing surface which more directly transfers loads from the stop bolt through the bearing plate and into the housing. Additionally, a relief slot is machined into the bearing plate to ensure the bearing plate deforms towards the torpedo and does not interfere with retraction of the torpedo from the tube. Finally, a nose fairing restraint prevents the nose fairing from rotating above the plane of the bearing plate when the deformation of the plate prevents the bearing plate from engaging the nose fairing.

6 Claims, 2 Drawing Sheets

